```
>> A
A =

   1   0   1   0   1   0   1   0
   0   1   0   1   0   1   0   1
   1   1   0   0   1   1   0   0
   0   0   1   1   0   0   1   1
   1   1   1   1   0   0   0   0
   0   0   0   0   1   1   1   1

>> transpose(A)
ans =

   1   0   1   0   1   0
   0   1   1   0   1   0
   1   0   0   1   1   0
   0   1   0   1   1   0
   1   0   1   0   0   1
   0   1   1   0   0   1
   1   0   0   1   0   1
   0   1   0   1   0   1

>> transpose(A)*A(:,1)
ans =

   3
   2
   2
   1
   2
   1
   1
   0

>> transpose(A)*A
ans =

   3   2   2   1   2   1   1   0
   2   3   1   2   1   2   0   1
   2   1   3   2   1   0   2   1
   1   2   2   3   0   1   1   2
   2   1   1   0   3   2   2   1
   1   2   0   1   2   3   1   2
   1   0   2   1   2   1   3   2
   0   1   1   2   1   2   2   3
```